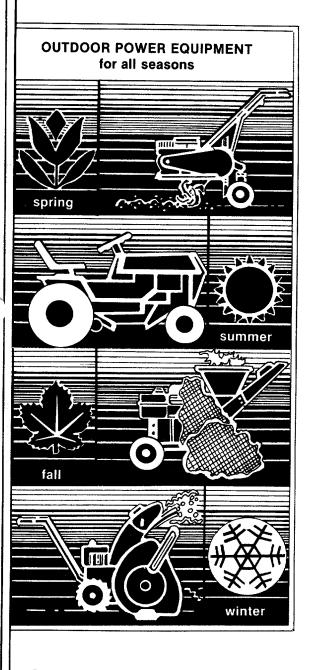
# OWNERSOUDE



3-1/2 H.P. LOG SPLITTER

Model Numbers 245-638-000 24638S

Important:

Read Safety Rules and Instructions Carefully

Thank you for purchasing an American-built product.

## INDEX

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Instructions given with this symbol are for personal safety. Be sure to follow them.

# LIMITED WARRANTY

For one year from the date of original retail purchase, MTD PRODUCTS INC will either repair or replace, at its option, free of charge, F.O.B. factory or authorized service firm, any part or parts found to be defective in material or workmanship. Transportation charges for the movement of any power equipment unit or attachment are the responsibility of the purchaser. Transportation charges for any parts submitted for replacement under this warranty must be paid by the purchaser unless such return is requested by MTD PRODUCTS INC.

This warranty will not apply to any part which has become inoperative due to misuse, excessive use, accident, neglect, improper maintenance, alterations, or unless the unit has been operated and maintained in accordance with the instructions furnished. This warranty does not apply to the engine, motor, battery, battery charger or component parts thereof. Please refer to the applicable manufacturer's warranty on these items.

This warranty will not apply where the unit has been used commercially.

Warranty service is available through your local authorized service dealer or distributor. If you do not know the dealer or distributor in your area, please write to the Customer Service Department of MTD.

The return of a complete unit will not be accepted by the factory unless prior written permission has been extended by MTD.

This warranty gives you specific legal rights. You may also have other rights which vary from state to state.



This unit is equipped with an internal conbustion engine and should not be used on or near any unimproved forest-covered, brush-covered or grass-covered land unless the engine's exhaust system is equipped with a spark arrester meeting applicable local or state laws (if any). If a spark arrester is used, it should be maintained in effective working order by the operator.

In the State of California the above is required by law (Section 4442 of the California Public Resources Code). Other states may have similar laws. Federal laws apply on federal lands. A spark arrester muffler is available at your nearest engine authorized service center.



It is suggested that this manual be read in its entirety before attempting to assemble or operate. Keep this manual a safe place for future reference and for ordering replacement parts.

is unit is shipped WITHOUT GASOLINE or OIL. After assembly, see separate engine manual for proper fuel and engine oil recommendations.

Your log splitter is a precision piece of power equipment, not a plaything. Therefore exercise extreme caution at all times.

# SAFE OPERATION PRACTICES FOR LOG SPLITTERS

#### **TRAINING**

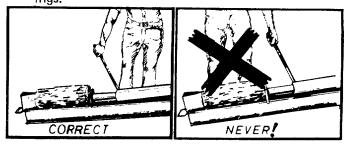
- Know the controls and how to stop quickly-READ THIS OWNER'S MANUAL.
- Do not allow children to operate. Do not allow adults to operate it without proper instruction. Only persons well acquainted with these rules of safe operation should be allowed to use your log splitter.
- 3. No one should operate this unit while intoxicated or while taking medication that impairs the senses or reactions.
- 4. Never use your splitter for any other purpose than splitting wood. It is designed for this use only and any other use may cause an injury.
- 5. Only the operator is to be near your log splitter during use. Keep all others, including pets, a minimum of 20 feet away from your work zone. Flying wood can be hazardous.
- 6. Don't step over your splitter when engine is running. You may trip or accidentally activate ram if you step over. If you need to get to the other side, walk around.

#### **PREPARATION**

- 1. Do not wear loose fitting clothing that could get caught on the moving parts.
- Do not operate equipment when barefoot or wearing open sandals. Always wear safety shoes or heavy boots. A dropped log can seriously injure your foot.
- 3. Check the fuel before starting the engine. Do not fill the gasoline tank indoors, when the engine is running, or while the engine is still hot. Wipe off any spilled gasoline before starting the engine.
- 4. Use only in daylight or in good artificial light.
- Never operate your splitter on slippery, wet, muddy, or icy surfaces. Safe footing is essential in preventing accidents. Never operate your splitter while attached to a towing vehicle.
- Always wear safety glasses or goggles while operating your log splitter. A piece of splitting log could fly off and hit your eyes.
- 7. Both ends of each log must be cut square. This will prevent the log from flying out of the splitter while under pressure.

#### **OPERATION**

- 1. Do not change the engine governor settings or overspeed the engine. Excessive engine speeds are dangerous.
- Never place hands or feet between log and splitting wedge or between log and ram during forward or reverse stroke. To do so may result in crushed or amputated fingers or toes, or worse, you may lose an arm or foot.
- If the equipment should start to vibrate abnormally, stop the engine and check immediately for the cause. Vibration is generally a warning of trouble.
- 4. When cleaning, repairing or inspecting, make certain all moving parts have stopped. Disconnect the spark plug wire, and keep the wire away from the plug to prevent accidental starting.
- 5. Handle gasoline with care. It is highly flammable.
  - A. Use approved gasoline container.
  - B. Never remove cap or add gasoline to a running or hot engine or fill fuel tank indoors: Wipe up spilled gasoline.
  - C. Don't run engine in an enclosed area. Exhaust gases contain carbon monoxide. This odorless gas can be deadly when inhaled.
- 6. Stand behind the ram when operating. See drawings.



- 7. Be careful not to touch the muffler after the engine has been running. It is **HOT**.
- 8. Never try to split two logs on top of each other. One may fly out and injure you.
- 9. When loading the log splitter, place your hands on the sides of the log, not at the ends.
- 10. For logs that are not cut square, the longest portion of the log should be rotated down and the most square end placed against the ram.

- Never attempt to split wood across the grain.
   Some types of wood may burst or fly out of your splitter and result in injury to you or a bystander.
- 12. Never leave your log splitter unattended with the engine running. Shut off the engine if you are leaving your splitter, even for a short period of of time. Someone could accidentally activate the ram and be injured.
- 13. Only use your hand to operate the ram or control lever. Never use your foot or a rope or any other extension device. This could result in your inability to stop your splitter quickly enough and cause an injury.
- 14. Only operate your splitter on the level ground and not on the side of a hill. It could tip, or ro ling logs or poor footing could cause an accident. This also prevents the spillage of gas from the tank.

#### MAINTENANCE and STORAGE

- 1. Don't operate your splitter in poor mechanical condition or when in need of repair.
- 2. Keep all nuts, bolts, screws, hose clamps and hydraulic fittings tight to be sure equipment is in safe working condition.
- 3. Replace all damaged or worn parts such as hydraulic hoses and fittings immediately with manufacturer approved replacement parts.

- 4. Never store the equipment with gasoline in the tank inside of a building where fumes may reach an open flame or spark. Allow the engine to cool before storing in any enclosure.
- 5. To reduce fire hazard keep engine free of gras leaves, wood chips, excessive grease and oil.
- The hydraulic system of your log splitter requires the careful inspection along with the mechanical parts. Be sure to replace frayed, kinked, cracked or otherwise damaged hydraulic components.
- 7. Fluid escaping from a very small hole can almost be invisible. Do not check for leaks with your hand. Escaping fluid under pressure can have sufficient force to penetrate skin, causing serious personal injury. Leaks can be located by passing a piece of cardboard or wood over the suspected leak and look for discoloration.
- 8. Should it become necessary to loosen or remove any hydraulic fitting or line, be sure to relieve all pressure by shutting off the engine and moving the control handle back and forth several times.
- 9. Don't remove the cap from the hydraulic tank or reservoir while your log splitter is running. Hot oil under pressure could cause injury.
- 10. Never store outside without a waterproof cover.

  Rain will cause rust on the inside of the cylinder



THIS UNIT SHOULD NOT BE TOWED ON ANY STREET, HIGHWAY OR PUBLIC ROAD. ANY LICENSING NEEDED TO COMPLY WITH THE EXISTING FEDERAL, LOCAL OR STATE VEHICLE REQUIREMENTS IS THE SOLE RESPONSIBILITY OF THE PURCHASER.

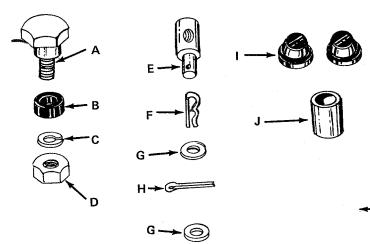


FIGURE 1

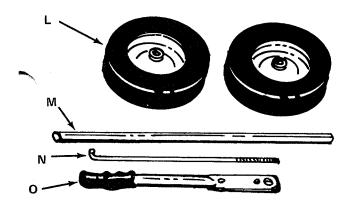


FIGURE 2

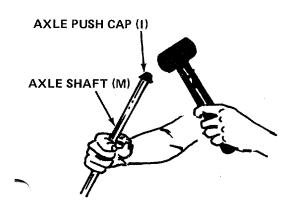


FIGURE 3

## **ASSEMBLY INSTRUCTIONS**

#### **TOOLS REQUIRED**

- (1) Raw Hide or Plastic Hammer
- (1) 3/4" Wrench or Adjustable Wrench
- (1) Pair of Pliers

#### OTHER MATERIALS NEEDED

One gallon of regular grade gasoline (for engine) 1-1/2 pints of SAE 30 or 10W30 oil (for engine).

Approximately 2 gallons of Dexron II automatic transmission fluid (may be obtained at any local service station or auto parts store).

#### Funnel

В

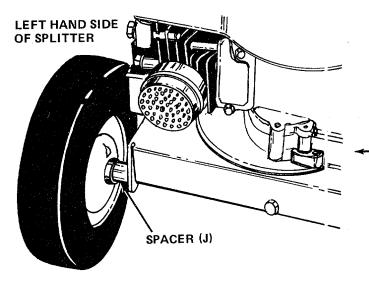
### ---- CONTENTS OF HARDWARE PACK (See figure 1):

- A (1) Shoulder Bolt
  - (1) Rubber Washer
- C (1) Lock Washer
- D (1) Hex Nut
- E (1) Ferrule
- F (1) Hairpin Cotter
- G (2) Flat Washers
- H (1) Cotter Pin
- (2) Axle Push Caps
- J (1) Spacer

## — LOOSE PARTS IN CARTON (See figure 2):

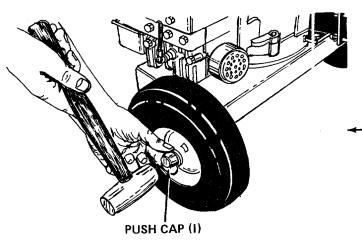
- L (2) Wheels
- M (1) Axle Shaft
- N (1) Engagement Rod
- O (1) Engagement Handle

- Remove log splitter and loose parts from carton. Make certain all parts and literature have been removed from the carton before the carton is discarded.
- Using a raw hide or plastic hammer, tap one axle push cap (I) on one end of axle shaft (M). See figure 3.
- 3. Slide one wheel onto the axle shaft.
- 4. Slide the axle through the frame from the right hand side of the splitter (as viewed from standing behind it).



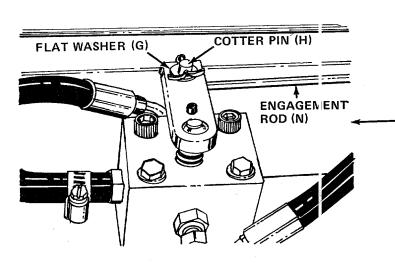
5. Slide spacer (J) onto axle shaft on the left hand side of the splitter. Spacer should be on the engine side of the splitter. See figure 4. Place the other wheel on the axle.

FIGURE 4



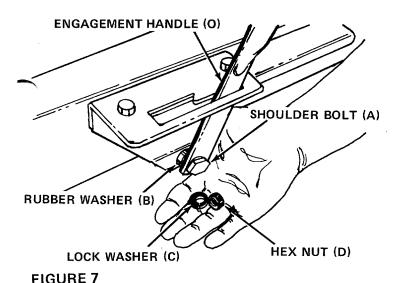
6. Secure wheel to axle with push cap (I). See figure\_\_\_\_\_\_

FIGURE 5

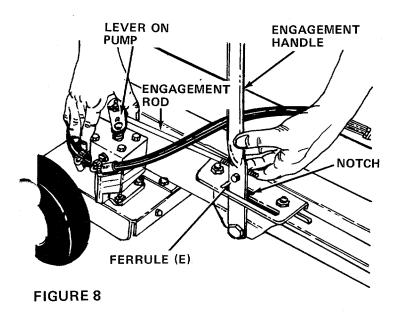


- 7. Hook the bent end of the engagement rod (N) into the lever on top of the pump. See figure 6.
- 8. Next, place one flat washer (G) over the rod. Insert the cotter pin (H) into the hole in the rod and secure by bending the ends of the cotter pin in opposite directions.

FIGURE 6



9. Place the flattened end of the engagement handle (O) down through the slotted bracket beside the beam. Place shoulder bolt (A) through the bottom hole in engagement handle. Place rubber washer (B) on shoulder bolt. Secure to bracket with lock washer (C) and hex nut (D). See figure 7.



- Place the engagement handle in the notch in the slotted bracket (Reverse position). See figures 8 and 11. Thread the ferrule (E) onto the end of engagement rod.
- 11. Push the lever on top of the pump as far toward the rear of the unit as it will go as shown in figure 8. Hold it in this position and adjust the ferrule on the engagement rod so the ferrule lines up with the hole in the engagement handle.
- 12. Secure the ferrule to engagement handle with flat washer (G) and hairpin cotter (F).

## **OPERATION**

#### **BEFORE STARTING**

- Fill reservoir tank on log splitter with approxmately 2 gallons of Dexron II automatic transmission fluid as follows. Check oil level before each use.
  - A. Block up front of log splitter so the beam is level
  - B. Remove the oil check plug from the back of the log splitter. See figure 9. If oil starts to come out of the hole, oil level is correct. If it does not, remove the cap from the breather tube and add oil until oil starts out of the check hole.
  - C. Replace oil check plug. Replace cap on the breather tube. Remove block from under front of beam.

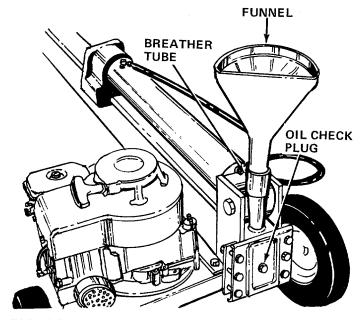


FIGURE 9



DO NOT operate log splitter without proper amount of oil in reservoir tank (beam).

- 2. Fill sump with oil as instructed in the separate engine manual packed with your unit.
- 3. Fill fuel tank, using clean, fresh, regular grade automotive gasoline. Fill tank completely.



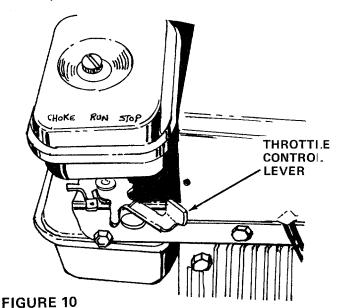
Refer to engine manual packed with log splitter for complete instructions for the care and maintenance of engine. READ DIRECTIONS CAREFULLY.

#### TO START ENGINE

 Place throttle control lever (on engine) in CHC KE position, towards the front of splitter. See figure 10.



A warm engine may not require choking. Simply place lever in RUN position.



- 2. Grasp starter handle, place one foot on wheel and pull starter handle with a quick, full arm stroke. Return rope slowly to the engine.
- 3. After engine starts, move throttle control lever to RUN position.

#### TO STOP ENGINE

- 1. Move throttle control lever to STOP position.
- 2. Disconnect spark plug wire from spark plug to prevent accidental starting while equipment is unattended.

#### **USING YOUR LOG SPLITTER**

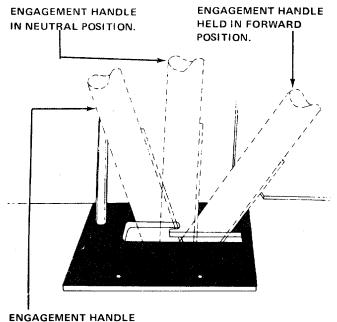
Your log splitter is designed for safe, efficient operation. BE CAREFUL TO KEEP HANDS AND FEET AWAY FROM MOVING PARTS.

Engagement handle has three positions: (See figure 11,

Forward - ram moves toward wedge.

Neutral - ram stops in place.

Reverse - ram returns.



LOCKED IN REVERSE POSITION.

#### FIGURE 11

Maximum length that can be split is 20".

#### TO OPERATE LOG SPLITTER:

- 1. Set throttle at maximum speed.
- Place log on beam and hold in place with right hand.
- 3. Slowly move engagement handle forward until ram rests against log. Release engagement handle (Neutral).
- 4. Remove your hand from the log and step behind the ram.
- 5. Move engagement handle forward until log is split.
- 6. Move the engagement handle to the rear to return ram.

The ram should take approximately 22 seconds to make a complete cycle. This speed may vary depending on throttle setting and temperature of oil.



If you lock the engagement handle in the reverse slot, the ram will return until it hits the engagement bracket, which will throw the engagement handle into neutral automatically.



Never attempt to cut a log in half with the log splitter.

Never stand next to the ram when operating. Always stand behind the ram.

## **MAINTENANCE**



Always stop engine and disconnect spark plug wire before performing any maintenance or adjustments.

#### **ENGINE OIL**

Change oil first two (2) hours of operation. Check oil level every five (5) operating hours or each time equipment is used.

Change oil every twenty-five (25) operating hours or sooner if equipment is operated in extremely dusty or dirty conditions.

Refer to engine manual for quantity and type of oil.

#### LOG SPLITTER RESERVOIR OIL

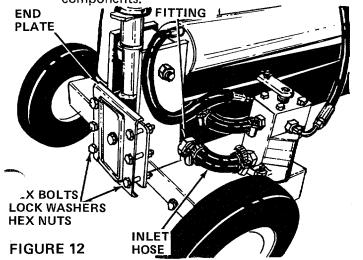
Check oil in log splitter reservoir before every use.

efer to "Before Starting" under OPERATION
ction.

Change the oil in the reservoir every 100 hours of operation. Remove the six hex bolts, lock washers and hex nuts which hold the end plate to the beam. Remove the plate and drain the oil. Be prepared to catch oil in a suitable container.



Drain the oil and flush the reservoir tank assembly and hoses each time repair work is performed on the tank, hydraulic pump or valve. Contaminants in the oil will damage the hydraulic components.



When the oil is drained from the reservoir, clean the strainer tube assembly as follows.

- 1. Remove the hose clamp at the inlet hose (bottom hose). See figure 12.
- 2. Pull the inlet hose off the fitting at the beam. Using an adjustable wrench, remove the fitting from the beam.
- 3. Reach inside the end of the beam and pull out the strainer tube assembly.
- 4. Clean the strainer tube assembly and reassemble in reverse order.

Reassemble the end plate. Refill oil reservoir with approximately 2 gallons of Dexron II automatic transmission fluid as instructed in "Before Starting" under OPERATION section.

#### **HOSE CLAMPS**

Check the hose clamps on the bottom of the pump for proper tightness before each use.

Hose clamps on the return hose should be checked once a season.

#### **CARBURETOR ADJUSTMENTS**



If any adjustments are made to the engine while the engine is running (e.g. carburetor), keep clear of all moving parts. Be careful of heated surfaces and muffler.

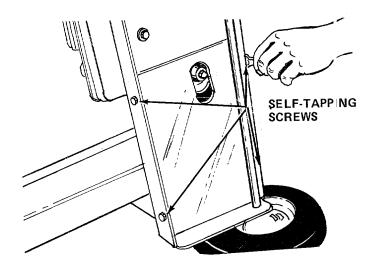
Refer to engine manual packed with your unit for carburetor adjustment information.

#### **BELT ADJUSTMENT**

- 1. Disconnect the spark plug wire from the spark plug and ground against the engine block.
- 2. Drain the gasoline from the fuel tank or place a piece of plastic under the cap to prevent leakage.
- 3. Tip the splitter on one side.
- 4. Remove four self-tapping screws from the bottom belt cover and frame. Refer to figure 13.
- 5. Loosen the three engine mounting bolts using a 1/2" wrench. Refer to figure 15.
- 6. Slide the engine outward to tighten the belt until there is approximately 1/2" deflection. Tighten engine mounting bolts securely.

#### **BELT REPLACEMENT**

- 1. Disconnect the spark plug wire from the spark plug and ground against the engine block.
- 2. Drain the gasoline from the fuel tank or place a piece of plastic under the cap to prevent leakage.
- 3. Tip the splitter on one side.
- 4. Remove four self-tapping screws from the bottom belt cover and frame. See figure 13.

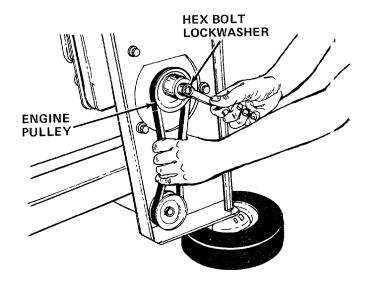


#### FIGURE 13

5. Using a 9/16" wrench, remove the engine pu ley by removing the hex bolt and lock washer. See figure 14. Slip the pulley and belt off.

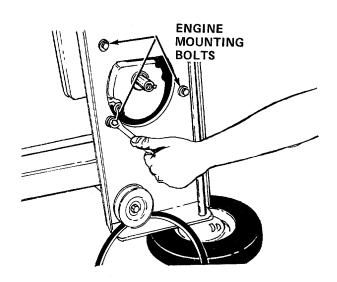


Be careful not to lose the square key on the crankshaft.



#### FIGURE 14

6. Loosen the three engine mounting bolts us ng a 1/2" wrench. See figure 15.



#### FIGURE 15

- 7. Install the new belt and replace the engine pulley.
- 8. Slide the engine outward to tighten the new belt until there is approximately 1/2" deflection. Tighten engine mounting bolts securely.

## **OFF-SEASON STORAGE**

In event engine is to be stored for any length of time (30 days or more), prepare as follows:

1. Drain gasoline by tipping or by siphon hose, then run engine until remainder is used and tank and carburetor are empty.



Drain gasoline into container outdoors, away from fire or flame.

- 2. Drain carburetor by running engine until it stops from lack of fuel.
- 3. Protect the inside of engine for storage by removing spark plug and pouring one ounce of SAE 30 oil through spark plug hole into cylinder. Crank engine, without starting, several times to spread oil over cylinder walls.
- 4. Never store outside without a waterproof cover.



When storing any type of power equipment in an unventilated or metal storage shed, care should be taken to rustproof the equipment. Using a light oil or silicone, coat the equipment, especially the beam and all moving parts.

# **TROUBLE SHOOTING CHART**

SYMPTOM	POSSIBLE CAUSE (S)	SOLUTION		
Engine fails to start	A. Check fuel tank for gas. B. Spark plug lead wire disconnected. C. Faulty spark plug.	<ul><li>A. Fill tank if empty.</li><li>B. Connect lead wire.</li><li>C. Spark should jump gap between</li></ul>		
		control electrode and side electrode. If spark does not jump, replace the spark plug.		
2. Hard starting or loss of	A. Spark plug wire loose.	A. Connect and tighten spark plug wire.		
power	B. Dirty air cleaner.	B. Clean air cleaner as described in engine manual.		
3. Engine overheats	A. Carburetor not adjusted properly.	A. Adjust carburetor. See engine manual.		
	B. Air flow restricted.	B. Remove blower housing and clean as described in the engine manual.		
	C. Engine oil level low.	C. Fill crankcase with the proper oil.		
4. Will not split logs	A. Reservoir oil level low.	A. Check and fill oil reservoir tank as instructed in Operation Section.		
	B. Belt is slipping.	B. Tighten belt or replace if worn. See     maintenance section.		
1	C. Pump setting incorrect.	C. Adjust pump setting to 3,000 p.s.i.*		
5. Leaking cylinder	A. Broken seals.	A. Replace seals.*		
	B. Scored cylinder.	B. Replace cylinder.*		

TE: For repairs beyond minor adjustments, please contact your local service dealer. \*Should be performed by an authorized service dealer only.

# IF YOU WRITE TO US ABOUT THIS ARTICLE OR IF YOU ORDER REPLACEMENT PARTS AL-WAYS MENTION THIS MODEL & SERIAL NO MODEL Model 638 .80<sub>,80</sub> 12 68 67 66 65 56 10 63 Ψ–A 61 21 20 62 ì8 19 В 53 SCHULTZ MECH WIRE Spring for Jump CZ-1001-00 2116-275-59848 ЭΟ NOTE This instruction manual covers various models

This instruction manual covers various models and all specifications shown do not necessarily apply to your model. Specifications subject to change without notice or obligation.

NOTE: The engine is not under warranty by the log splitter manufacturer . . . If repairs or service is needed on the engine, please contact your nearest author-

ized engine service outlet. Check the "Yellow Pages" of your telephone book under "Engines—Gasoline."



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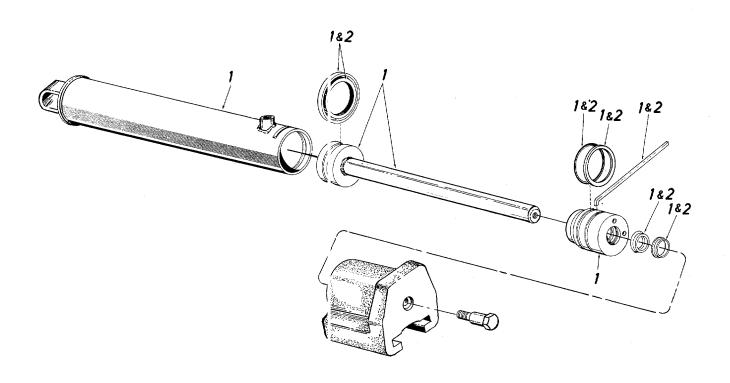
# Model 638

## PARTS LIST FOR MODEL 638 LOG SPLITTER

1	-	TARTO EIGHT ON MODEL 000 EOG OF EITTER								
2 720-015		PART NO.	COLOR CODE	DESCRIPTION					DESCRIPTION	NEW PART
2 720-0159 Grip Grip 3 737-0196 90° Elbow Adapter 719-0270 Fusher Plate 5 738-00601 Shoulder Bott 5/8" Dia. X .660" Lg. 1/2-13 Thd. Lg. X .660" Lg. 1/2-13 Thd. N 51 712-0267 Frame - Motor Sq. Key 3/16" x 3/16" x 1.50" Lg. X .660" Lg. 1/2-13 Thd. N 51 712-0267 Frame - Motor Sq. Key 3/16" x 3/16" x 1.50" Lg. Y .736-0119 Lg. Wash. 5/16" LD. * 150" Lg. Y .736-0119 Lg. Wash. 5/16" LD. * 150" Lg. Y .736-0119 Lg. Wash. 5/16" LD. * 150" Lg. Y .736-0119 Lg. Wash. 5/16" LD. * 150" Lg. Y .736-0119 Lg. Wash. 5/16" LD. * 150" Lg. Y .736-0132 Lg. Wash. 5/16" LD. * 150" Lg. Y .736-0132 Lg. Wash. 5/16" LD. * 150" Lg. Y .736-0132 Lg. Wash. 5/16" Lg. Y .736-0132 Lg. Wash. 5/16" LD. * 150" Lg. Y .736-0132 Lg. Wash. 5/16" Lg. Y .736-0132 Lg. Wash. 5/16" Lg. Y .736-0132 Lg. Wash. 6/16" Lg. Wash. 5/16" Lg. Y .736-0132 Lg. Wash. 140 Shoulder Boit .437" Dia. X .2.75 Lg. Thuber Wash. 140 Shoulder Boit .437" Dia. X .2.75 Lg. Engine - B. & S .736-0132 Lg. Wash. 140. Shoulder Boit .437" Dia. X .2.75 Lg. Engine - B. & S .736-0132 Lg. Wash. 140. Shoulder Boit .437" Dia. X .756-018 Sleeve .632" LD. X .875" O.D. X .90" Lg. Y .748-10. X .758-119 Lg. Wash. 140. Shoulder Boit .498 X .340 Fab. 20 Lg. Y .748-10. X .758-119 Lg. Y .758-119 Lg. Y .758-119 Lg. Y .758-1	1	717-0	816	2-1/2" Cylinder Ass'y, Comp	. N	46	741-	0116	Flange Brg_w/Flats_631"   [	)
3   737-0196   90° Elbow Adapter   N   48   781-0071   Frame - Motor   N   471-0133   Frame - Motor   N   471-0133   Frame - Motor   N   471-0133   Sq. Key 3/16" x   3/16" x   1.50" Lg. **   5   738-0601   Shoulder Bolt 5/8" Dia. x   660" Lg. 1/2-13 Thd. N   51   712-0267   The Nutr 15/16-18 Thd. *		720-0	157	Grip						ī.
A   719-0270   Pusher Plate   N   49   714-0133   So.   Key 3/16" x   3/16" x   150"   Lg.				90° Elbow Adapter	N					N
Shoulder Bolt 5/8" Dia.					N					'`
X	5	738-0	601							
6 749-0663				x .660" Lg. 1/2-13 Thd.	N	51	712-	0267		
77   711-0628				Engagement Handle	Ņ		736-	0119		
9 736-0119										N
10						54	737-0	0183		
11										
12						55	737-0	0182		
13										
Lg. (Grade 5)   LWash. 5/8"   L.D.   September 10   LWash. 5/8"   L.D.   September 10   LWash. 3/8"   L.D.   September 10   LWash. 3/4"					N				Hose Clamp 5/8" I.D.	
14	13	/10-0	298			57	737-0	0184	Adapter 1/2" Tube 9/16-18	
15	1	700.0	450							
16					1					
17					N	59	714-0	0507		
18						00	700	2004		
19					i	60	/36-0	J264		
20						0.1	707 /	2204		
21					1					
X . 180" Lg.   Extension Spring .50" O.D.   Adapter 1.0" Tube 1-1/16-				Shoulder Polt 127" Die						N I
Table   Tabl	- '	730-0	140	v 180" La	1				Hose Clamp 1/4 I.D.	
X 4.25" Lg.   Engine - B & S   Wheel Ass'y. Comp. 10.0"   X 2.75   N   N   N   N   N   N   N   N   N	-22	732-0	352			04	/3/-(	ופונ	Adapter I.U Tube I-1/16-	N.
29	`~	7020	002		İ	65	712 (	1267		IN
30	. 29		Ī							
X 2.75		734-0	736		İ				El-Wash 343" ID v 687"	
31					N	٠, ا	, 55 (	,,,,		
32	31	750-0	118			68	710-0	0442		
32				O.D. x .90" Lg.	1	1				
Scr. 1/4-20 x .50" Lg.   70   721-0205   Gasket   N   78" I.D. x   7/8" I.D. x   1/8"	32	710-0	599			69	710-0	0604	Hex Hd. Tap Scr. 5/16"	1
7/8" I.D. x 3-1/4" O.D.  7/8 I.D. x 3-1/4" O.D.  7/8 I.D. x 3-1/4" O.D.  7/8 I.D. x 3-1/4" I.D. x 3-1				Scr. 1/4-20 x .50" Lg.		70	721-0	0205		N
34       754-0278       "V"-Belt (4L) 1/2" V x 30" Lg.       73       712-0203 Tel. (2003)       Hex Nut 3/4" Thd.* LWash. 3/4" I.D.*       Number of the control of the contr	33	756-0	425	1/2" V-Pulley 7/8" I.D. x			781-0	0023	End Plate	N
30" Lg.   74   736-0364   736-0364   1.D.*   74   736-0364   736-0364   736-0319   745-0174   75   781-0036   745-0174   75   781-0036   745-0174   75   781-0036   745-0174   75   781-0036   745-0174   75   781-0036   745-0174   75   781-0036   745-0174   775   781-0036   775   781-0036   775   781-0036   775   781-0036   775   781-0036   775   781-0036   775   781-0036   775   781-0036   775   781-0036   775   781-0036   775   781-0036   775   781-0036   775   781-0036   775   781-0036   775   781-0036   775   781-00376   775   781-0036   775   781-0036   775   781-0036   775   781-0036   775   781-0036   775   781-0036   775   781-00376   775   781-0036   775   781-0020   775   781-0020   775   781-0020   775   781-0020   775   781-0020   775   781-0020   775				7/8" I.D. x 3-1/4" O.D.						N
Section   Sect	34	754-0	278	"V"-Belt (4L) 1/2" V x	-					
Columbia		704.0	000							
37       710-0152       Hex Bolt 3/8-24 x 1.0" Lg.* 1/2 (4L) "V"-Pulley 5/8"       77       737-0197       45° Male Adapter 7/16-20 MJ-1/4-18 NP       N         39       710-0938 40       Set Scr. 1/4-28 x .25" Lg. BellWash40" I.D. x .88" O.D.       79       710-0920 Hex Bolt 3/4" x 4.0" Lg. N       Hex Bolt 3/8-24 x 1.0" Lg. N       N         41       710-0949 Fig. Wash. Hd. TT-Tap Scr. 3/8-16 x .87" Lg. Hex Nut 5/16-24 Thd.* Hex Bolt 5/16-18 x 1.00" Lg.* Hex Bolt 5/16-18 x 1.00" Lg.* LWash. 5/16" I.D." I Axle Shaft 5/8" Dia. x 25.5" Lg.       82       747-0493 Fig. Wash344" I.D. x .62" O.D. x .063       N         45° Male Adapter 7/16-20 MJ-1/4-18 NP O"-Ring .92" I.D. x 1.16" O.D. x .116 Dia.       N         77       737-0197 MJ-1/4-18 NP O"-Ring .92" I.D. x 1.16" O.D. x .116 Dia.       N         79       710-0920 MJ-1/4-18 NP O"-Ring .92" I.D. x 1.16" O.D. x .116 Dia.       N         80       712-0338 Miss of the complex of the c										N
38       756-0426       1/2 (4L) "V"-Pulley 5/8"       78       721-0204       MJ-1/4-18 NP       N         39       710-0938       Set Scr. 1/4-28 x .25" Lg.       79       710-0920       Hex Bolt 3/4" x 4.0" Lg.       N         40       736-0105       BellWash40" I.D. x .88" O.D.       79       710-0920       Hex Bolt 3/4" x 4.0" Lg.       N         41       710-0649       Hex Wash. Hd. TT-Tap Scr. 3/8-16 x .87" Lg.       81       710-0117       Hex Bolt 5/16-12 Thd. NHex Bolt 5/16-24 x 1.00" Lg.       N         42       712-0123       Hex Nut 5/16-24 Thd.* Hex Bolt 5/16-18 x 1.00" Lg.*       82       747-0493       Fil-Wash344" I.D. x .62" O.D. x .063         44       736-0119       LWash. 5/16" I.D."       83       736-0264       Fil-Wash344" I.D. x .62" O.D. x .063         45       747-0458       Axle Shaft 5/8" Dia. x 25.5" Lg.       84       714-0104       Hair Pin Cotter 5/16" Dia.										
1.D. x 3-1/2" O.D.   78   721-0204   "O"-Ring .92" I.D. x 1.16"   N   Set Scr. 1/4-28 x .25" Lg.   BellWash40" I.D. x .88"   O.D.   80   712-0338   Hex Bolt 3/4" x 4.0" Lg.   N   Hex Wash. Hd. TT-Tap Scr.   3/8-16 x .87" Lg.   Hex Nut 5/16-24 Thd.*   Hex Bolt 5/16-18 x 1.00" Lg.*   Hex Bolt 5/16-18 x 1.00" Lg.*   Hex Bolt 5/16-18 x 1.00" Lg.*   LWash. 5/16" I.D."   I   Axle Shaft 5/8" Dia. x 25.5" Lg.   84   714-0104   Hair Pin Cotter 5/16" Dia.   N   Hex Bolt 3/4" x 4.0" Lg.   N   Hex Bolt 5/16-24 x 1.00" Lg.   N   Hex Bolt 5/16-24 x 1.00" Lg.   N   Hex Bolt 5/16-24 x 1.00" Lg.   N   Hex Bolt 5/16-18 x					1	//	/3/-(	)19/		
39       710-0938       Set Scr. 1/4-28 x .25" Lg.       79       710-0920       Hex Bolt 3/4" x 4.0" Lg.       N         40       736-0105       BellWash40" I.D. x .88"       79       710-0920       Hex Bolt 3/4" x 4.0" Lg.       N         41       710-0649       Hex Wash. Hd. TT-Tap Scr.       80       712-0338       Hex Nut 11/16-12 Thd.       N         42       712-0123       Hex Nut 5/16-24 Thd.*       81       710-0117       Hex Bolt 5/16-24 x 1.00" Lg.       (Grade 5)         43       710-0376       Hex Bolt 5/16-18 x 1.00" Lg.*       83       736-0264       FIWash344" I.D. x .62"       N         44       736-0119       LWash. 5/16" I.D."       I       O.D. x .063       Hair Pin Cotter 5/16" Dia.         45       747-0458       Axle Shaft 5/8" Dia. x 25.5" Lg.       84       714-0104       Hair Pin Cotter 5/16" Dia.	30	756-04	420			70	721	0004		N
40       736-0105       BellWash40" l.D. x .88" O.D.       79       710-0920 Rex No.00 A.D.       Hex Bolt 3/4" x 4.0" Lg.       N         41       710-0649       Hex Wash. Hd. TT-Tap Scr. 3/8-16 x .87" Lg.       81       710-0117 A.D. x .62" Grade 5)       Hex Bolt 5/16-24 x 1.00" Lg. (Grade 5)       Engagement Rod 16.75" Lg. N         42       712-0123 A.D. x .62" A.D. x .	20	710.0	020		Í	78	/21-0	0204		
41       710-0649       O.D. Hex Wash. Hd. TT-Tap Scr. 3/8-16 x .87" Lg. Hex Nut 5/16-24 Thd.* Hex Nut 5/16-24 Thd.* Hex Bolt 5/16-18 x 1.00" Lg.* Hex Bolt 5/16-18 x 1.00" Lg.       82       747-0493       FilWash344" I.D. x .62" O.D. x .063       N         44       736-0119 Hex Bolt 5/16" I.D."       Axle Shaft 5/8" Dia. x 25.5" Lg.       84       714-0104       Hair Pin Cotter 5/16" Dia.				Set Scr. 1/4-20 X .25 Lg.	ļ	70	710.0	2020		N
41       710-0649       Hex Wash. Hd. TT-Tap Scr. 3/8-16 x .87" Lg.       81       710-0117       Hex Bolt 5/16-24 x 1.00" Lg. (Grade 5)         42       712-0123       Hex Nut 5/16-24 Thd.* Hex Bolt 5/16-18 x 1.00" Lg.* Hex Bolt 5/16-18 x 1.00" Lg.* Hex Bolt 5/16-18 x 1.00" Lg.* Hex Bolt 5/16-24 x 1.00" Lg.       82       747-0493       FIWash344" I.D. x .62" O.D. x .063       N         44       736-0119       LWash. 5/16" I.D." I.D. x .62" O.D. x .063       Hair Pin Cotter 5/16" Dia.	40	/30-0	105		1					١ , ١
3/8-16 x .87" Lg.  42 712-0123	111	710-04	2/0							
42       712-0123       Hex Nut 5/16-24 Thd.*       82       747-0493       Engagement Rod 16.75" Lg. N         43       710-0376       Hex Bolt 5/16-18 x 1.00" Lg.*       83       736-0264       FIWash344" I.D. x .62" O.D. x .063         44       736-0119       LWash. 5/16" I.D."       I         45       747-0458       Axle Shaft 5/8" Dia. x 25.5" Lg.       84       714-0104       Hair Pin Cotter 5/16" Dia.	"	7 10-00	J-TJ		1	01	/ 10-0	''''	U -	
43       710-0376       Hex Bolt 5/16-18 x 1.00" Lg.*       83       736-0264       FlWash344" l.D. x .62"         44       736-0119       LWash. 5/16" l.D."       I         45       747-0458       Axle Shaft 5/8" Dia. x 25.5" Lg.       84       714-0104       Hair Pin Cotter 5/16" Dia.	42	712-0	123		İ	82	7/17 (	1492		N.
44 736-0119 LWash. 5/16" I.D." I O.D. x .063 Hair Pin Cotter 5/16" Dia.					*					IN
45 747-0458 Axle Shaft 5/8" Dia. x 25.5" Lg. 84 714-0104 Hair Pin Cotter 5/16" Dia.					.	55	, 50-0	,207		
				Axle Shaft 5/8" Dia. x 25 5"	La	84	714-0	104		
			<u> </u>		-3.					

or faster service obtain standard nuts, bolts and washers locally. If these items cannot be obtained locally, order by part number and size as shown on parts list.

# Model 638



# 2-1/2" DIA. CYLINDER PARTS LIST FOR MODEL 638

REF. NO.	PART NO.	DESCRIPTION	NEW PART
1 2	717-0816	Cylinder Ass'y. Comp.	N
	753-0392	2- /2" Cyl. Kit "O"-Ring Set	N

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